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U.S. Department of Homeland Security
U.S. Citizenship and Immigration Services
Office of Administrative Appeals MS 2090
Washington, DC 20529-2090



**U.S. Citizenship
and Immigration
Services**

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FILE:

[REDACTED]
SRC 07 800 21815

Office: TEXAS SERVICE CENTER

Date: **JUL 29 2009**

IN RE:

Petitioner:
Beneficiary:
[REDACTED]

PETITION: Immigrant Petition for Alien Worker as a Member of the Professions Holding an Advanced Degree or an Alien of Exceptional Ability Pursuant to Section 203(b)(2) of the Immigration and Nationality Act, 8 U.S.C. § 1153(b)(2)

ON BEHALF OF PETITIONER:

[REDACTED]

INSTRUCTIONS:

This is the decision of the Administrative Appeals Office in your case. All documents have been returned to the office that originally decided your case. Any further inquiry must be made to that office.

A handwritten signature in black ink, appearing to read "John F. Grissom".

John F. Grissom
Acting Chief, Administrative Appeals Office

DISCUSSION: The Director, Texas Service Center, denied the employment-based immigrant visa petition. The matter is now before the Administrative Appeals Office (AAO) on appeal. The AAO will sustain the appeal and approve the petition.

The petitioner seeks classification pursuant to section 203(b)(2) of the Immigration and Nationality Act (the Act), 8 U.S.C. § 1153(b)(2), as a member of the professions holding an advanced degree. The petitioner seeks employment as a postdoctoral research fellow at the University of Michigan, Ann Arbor. The petitioner asserts that an exemption from the requirement of a job offer, and thus of a labor certification, is in the national interest of the United States. The director found that the petitioner qualifies for classification as a member of the professions holding an advanced degree but that the petitioner had not established that an exemption from the requirement of a job offer would be in the national interest of the United States.

On appeal, the petitioner submits a brief from counsel and new exhibits.

Section 203(b) of the Act states, in pertinent part:

(2) Aliens Who Are Members of the Professions Holding Advanced Degrees or Aliens of Exceptional Ability. --

(A) In General. -- Visas shall be made available . . . to qualified immigrants who are members of the professions holding advanced degrees or their equivalent or who because of their exceptional ability in the sciences, arts, or business, will substantially benefit prospectively the national economy, cultural or educational interests, or welfare of the United States, and whose services in the sciences, arts, professions, or business are sought by an employer in the United States.

(B) Waiver of Job Offer.

(i) . . . the Attorney General may, when the Attorney General deems it to be in the national interest, waive the requirements of subparagraph (A) that an alien's services in the sciences, arts, professions, or business be sought by an employer in the United States.

The director did not dispute that the petitioner qualifies as a member of the professions holding an advanced degree. The sole issue in contention is whether the petitioner has established that a waiver of the job offer requirement, and thus a labor certification, is in the national interest.

Neither the statute nor the pertinent regulations define the term "national interest." Additionally, Congress did not provide a specific definition of "in the national interest." The Committee on the Judiciary merely noted in its report to the Senate that the committee had "focused on national interest by increasing the number and proportion of visas for immigrants who would benefit the United States economically and otherwise. . . ." S. Rep. No. 55, 101st Cong., 1st Sess., 11 (1989).

Supplementary information to the regulations implementing the Immigration Act of 1990 (IMMACT), published at 56 Fed. Reg. 60897, 60900 (November 29, 1991), states:

The Service [now U.S. Citizenship and Immigration Services] believes it appropriate to leave the application of this test as flexible as possible, although clearly an alien seeking to meet the [national interest] standard must make a showing significantly above that necessary to prove the “prospective national benefit” [required of aliens seeking to qualify as “exceptional.”] The burden will rest with the alien to establish that exemption from, or waiver of, the job offer will be in the national interest. Each case is to be judged on its own merits.

Matter of New York State Dept. of Transportation, 22 I&N Dec. 215 (Commr. 1998), has set forth several factors which must be considered when evaluating a request for a national interest waiver. First, it must be shown that the alien seeks employment in an area of substantial intrinsic merit. Next, it must be shown that the proposed benefit will be national in scope. Finally, the petitioner seeking the waiver must establish that the alien will serve the national interest to a substantially greater degree than would an available U.S. worker having the same minimum qualifications.

It must be noted that, while the national interest waiver hinges on prospective national benefit, it clearly must be established that the alien’s past record justifies projections of future benefit to the national interest. The petitioner’s subjective assurance that the alien will, in the future, serve the national interest cannot suffice to establish prospective national benefit. The inclusion of the term “prospective” is used here to require future contributions by the alien, rather than to facilitate the entry of an alien with no demonstrable prior achievements whose benefit to the national interest would be entirely speculative.

We also note that the regulation at 8 C.F.R. § 204.5(k)(2) defines “exceptional ability” as “a degree of expertise significantly above that ordinarily encountered” in a given area of endeavor. By statute, aliens of exceptional ability are generally subject to the job offer/labor certification requirement; they are not exempt by virtue of their exceptional ability. Therefore, whether a given alien seeks classification as an alien of exceptional ability, or as a member of the professions holding an advanced degree, that alien cannot qualify for a waiver just by demonstrating a degree of expertise significantly above that ordinarily encountered in his or her field of expertise.

The petitioner filed the petition on July 25, 2007. The initial submission included six witness letters describing the petitioner’s work in the field of bioinformatics. Assistant Professor [REDACTED] of the University of Michigan stated:

I have known [the petitioner] since 2006 when she joined my research group in the Department of Pathology at the University of Michigan. . . .

[The petitioner] has been doing innovative and cutting-edge research on the development of novel computational algorithms to study large-scale biological data.

She is currently conducting proteomics research to catalog and quantify the proteins present in cells through computational analysis of mass spectrometry data. Proteins play a central role in human life, and protein/peptide identification is critical for prevention and treatment of diseases. Therefore, the results of this work have broad applications in drug manufacture and therapies to cure human diseases. This is an extremely challenging project, because it involves professional knowledge in multiple fields, such as genetics, computational chemistry, database operations, algorithm design, and programming. . . .

[The petitioner] is currently working on developing computational algorithms and methods for mass spectrometry based peptide identification. . . . [The petitioner] proposes that by using suitable filters and new scoring functions, peptide identification can be conducted in a more accurate and faster manner than the traditional peptide identification tools.

University of Michigan Associate Professor [REDACTED] stated:

I have been collaborating with [the petitioner] in her research on peptide and protein identification. . . .

[The petitioner] is currently working on developing bioinformatics algorithms and methods for proteomics analysis. This research has tremendous potential to United States healthcare market [*sic*]. . . . By charting the distribution of proteins, identifying and characterizing proteins of interest and elucidating the function of proteins in biochemical pathways, proteomics will boost the number of potential drug targets. . . .

One of [the petitioner's] current projects is developing proteomics algorithm[s] for mass spectrometry based peptide and protein identification. [The petitioner] proposed to design appropriate filters to conduct peptide identification. The novel employment of filters in the algorithm can significantly increase the accuracy and speed of the identification than the traditional peptide identification tools. . . .

[The petitioner's] contribution to the bioinformatics research cannot be underestimated [*sic*], as her work is likely to produce further breakthroughs in the area of proteomics and genomics data analysis, which in turn can directly speed up our search for cures for various chronic diseases.

[REDACTED], who is “currently working as a Researcher in Natural Language Computing at Microsoft Research Asia, Beijing, China,” met the petitioner in “2001 when she joined the doctoral program at the department of Computer Science at the National University of Singapore.” [REDACTED] stated:

[The petitioner] is an expert in the field of bio-inspired computational algorithm design, and played a central role in development of computer immune system design during her graduate study. . . .

[The petitioner's unique background in computer algorithm design and database data mining assures her success in the research of biological database search. . . . [The petitioner] discovered a new search algorithm for searching genome databases that shortlists potential matches for a given query sequence. Results have shown that [the petitioner's] new algorithm is 200 times faster in speed for long queries than the existing tools.

The remaining three witnesses asserted independence from the petitioner. [REDACTED] of the University of Waterloo, Canada, stated that the petitioner's "work will provide a deeper understanding of the relationship between gene sequence and protein structure, dynamics and function, and will help to extract information hidden in the gene sequences of genomes, which in turn, will help develop drugs to fight disease." [REDACTED] asserted that the petitioner's "findings and theories have had a strong influence among researchers in the field of bioinformatics," but rather than identify instances of this influence, [REDACTED] speculated as to where the petitioner's work "will lead."

of Drexel University, Philadelphia, Pennsylvania, stated:

Although I have not collaborated with [the petitioner], I was aware of her research when I attended her presentation at BMES 2004 conference in Pennsylvania. . . .

[The petitioner's] compression technique significantly reduces storage size of genomic data, and speeds up processing time while maintaining satisfactory accuracy. . . . [The petitioner] also developed a computational algorithm to efficiently filter out data sequences with low similarity and perform efficient scanning of the sequence compression to find occurrences of reference words. . . . These undoubtedly significant research results were well received by researchers at the conference, and will help the development of promising new computational algorithms that search genome databases in a more effective way.

[REDACTED] of Worcester (Massachusetts) Polytechnic Institute stated that the petitioner's work is "of great significance. It helps generate and analyze various large-scale biological data, and consequently create new databases of biological knowledge."

The petitioner submitted a "Citation Summary" listing eighteen claimed citations to the petitioner's work. The "Citation Summary" identified no source for the information on the list, and the petitioner did not submit copies of the citing articles themselves.

The director denied the petition on November 25, 2008, stating that the record does not show that the petitioner "has accomplished anything more significant than other capable members of the profession

holding similar credentials and conducting similar work.” On appeal, counsel argues that the director did not give sufficient consideration to independent witness letters submitted with the petition.

More witness letters accompany the appeal. [REDACTED] contends that the petitioner “is one of the finest scientists in the United States who have succeeded in the innovative and cutting-edge research on bioinformatics for proteomics.” He states:

Development in genomic research has caused an explosive growth in the size of DNA databases, which created strong challenge[s] for DNA data analysis. The method created by [the petitioner] and her colleagues overcomes this problem with a long probe length and relaxed matching. The importance of this invention lies in its efficiency. Previous methods required big servers or super-computers, while [the petitioner’s] method enables clinicians and scientists easily to search large DNA sequence databases on a desktop computer. Therefore the significance of this work cannot be over estimated.

Chief Operating Officer of MOZAT Pte Ltd., Singapore, states:

[The petitioner] and I collaborated [on] a project [in] 2003 to develop new bioinformatics tools for large DNA data analysis, and published a paper entitled “The ed-tree: an index for large DNA sequence databases.” . . . [The petitioner] invented an algorithm called the ed-tree for supporting fast and effective homology searches on DNA databases. . . . This excellent method has been frequently cited by other scientist[s] across the world . . . 14 times.

On the subject of citations, the petitioner submits an updated citation list, this time accompanied by a printout from Google Scholar (<http://scholar.google.com>). The printout shows 34 citations of the petitioner’s articles. (The cited articles appeared before the petition’s filing date.) The petitioner also submitted copies of sample articles that cite her work. The overall pattern of citations shows proportionately more independent citations than in the previous, unattributed list.

One author who has cited the petitioner’s work provides a witness letter on appeal. [REDACTED] of the University of Illinois at Chicago stated:

[The petitioner] has been consistently making significant contributions in the development of bioinformatics techniques. One of [the petitioner’s] efforts, which I extensively discussed and highly rated in my paper “Survey on index based homology search algorithms” is a . . . novel hash-based Pier method to perform efficient and sensitive DNA sequence similarity search. . . . As I showed in my paper, [the petitioner’s] hash-based pier model is one of the best methods that can most effectively extract useful information from data produced by . . . next-generation genome sequencing.

The significance of [the petitioner's] research has been highly recognized by the bioinformatics research community. . . .

In my opinion, there is more than enough evidence to show [the petitioner's] outstanding ability and significance in her research field of bioinformatics. Her work has been influential and has stimulated not only my research but the research of others. . . . She should be regarded as one of the best.

article, discussed above, was published before the petition's filing date.

[REDACTED] of the University of California, San Diego (UCSD), states:

I, along with other top bioinformatics scientists in UCSD, have decided to include one of [the petitioner's] methods in our bioinformatics software InsPecT . . . [which] has been widely used by biomedical researchers to identify peptides and proteins from complex clinical samples. . . . [The petitioner's] method will directly make [a] significant contribution via this platform to disease diagnosis and drug discovery in the United States.

The implementation discussed by [REDACTED] took place after the petition's filing date, but other materials in the record show that this continues an already-existing pattern of influence within the field, rather than creating a completely new set of circumstances.

Independent witnesses, both initially and on appeal, have attested to the significance of the petitioner's work. The citation documentation submitted on appeal provides objective evidence of the growing influence of the petitioner's work. This consistent pattern of specific and increasing influence appears, on balance, to be sufficient to establish a preponderance of evidence in the petitioner's favor.

It does not appear to have been the intent of Congress to grant national interest waivers on the basis of the overall importance of a given field of endeavor, rather than on the merits of the individual alien. That being said, the evidence in the record establishes that the scientific community recognizes the significance of this petitioner's work rather than simply the general area of bioinformatics. The benefit of retaining this alien's services outweighs the national interest that is inherent in the labor certification process. Therefore, the petitioner has established that a waiver of the requirement of an approved labor certification will be in the national interest of the United States.

The burden of proof in these proceedings rests solely with the petitioner. Section 291 of the Act, 8 U.S.C. § 1361. The petitioner has sustained that burden. Accordingly, the decision of the director denying the petition will be withdrawn and the petition will be approved.

ORDER: The appeal is sustained and the petition is approved.